

REMARKS

Claims 1-14 and 24-25 are now pending in the application (Claims 15-23 have been withdrawn from consideration). Each of Claims 1 and 14, the independent claims, has been amended herein. Dependent Claims 24-25 have been added.

Rejections Under 35 USC 102(e) and 103 (a)

Claims 1-8 and 10-14 were rejected under 35 USC 102(e) as being anticipated by newly-cited US Patent 7,065,586 (Ruttenberg et al.); Claim 9 was rejected under 35 USC 103(a) as being unpatentable over Ruttenberg in view of newly-cited US Patent 6,920,110 (Roberts et al.). Each of these rejections is respectfully traversed and reconsideration is requested.

Independent Claim 1, as amended herein, is directed to a method for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the method including evaluating local user conditions associated with transfer of the local data, based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data, determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle, based on the approximated transfer time, the local user conditions, and the *status of the local processor*, selecting a time to transmit the local data to the remote data storage medium, and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time.

Independent Claim 14 is an apparatus claim corresponding to method Claim 1, and, as amended herein, specifically is directed to an apparatus for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium...., the apparatus including a computer-readable storage medium and a processor responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor, operative to perform a method including evaluating local user conditions associated with transfer of the local data, based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data, determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle, based on the approximated transfer time, the local user conditions, and the *status of the local processor*, selecting a time to transmit the local data to the remote data storage medium, and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time.

As explained in paragraph [0005] of Applicants' specification, as filed, a "typical local PC client has a single processor under independent control, and a limited bandwidth communication link to any remote data storage medium" – the "local PC may be unable to concurrently perform multiple processing-intensive tasks, such as transferring large data files and running unrelated user applications, and/or data transfers may be slow".

Applicants' proposed method takes these facts into account, by determining if a local processor is idle or has reduced activity, and using that determination (in addition to the local user conditions and the approximated time for transfer) to select a time to transmit the local data to the remote storage device.

As discussed at least in paragraph [0050] of Applicants' specification as filed, "based on the approximated transfer time, the user conditions, and the status of a local processor, such as processor 22, a time to transmit the data is selected at block 206...the time selected may be for example, *when the local processor is idle, or during periods of reduced processor activity*".

Ruttenberg is directed to a system/method for scheduling data transfers over a network, wherein “a scheduling module at each node evaluates a single hop request in view of objectives, such as a deadline, and the available resources at that node, for example, transmit bandwidth, receive bandwidth, and storage space, all of which may change as a function of time” (Abst).

Ruttenberg does not teach, or suggest in any way, a method in which a time to transmit data is selected based upon (1) the approximate time it would take to transfer the data, (2) the local user conditions, and (3) the status of the *local processor* (the status including a determination if the local processor has *reduced activity*, or is *idle*).

For at least the foregoing reasons, Applicants respectfully submit that each of amended independent Claims 1 and 14 is patentable over Ruttenberg.

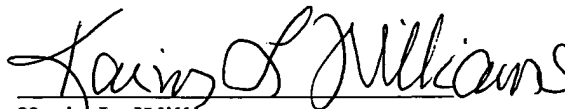
Dependent Claims 2-13 and 24-25 are also believed to be clearly patentable over the art of record for all of the reasons indicated above with respect to Claim 1, from which they depend, and even further distinguish over the cited references by reciting additional limitations. For example, dependent Claim 6 recites the further step of “automatically arranging for interruption of transfer of the local data based on the status of the local processor”. The Final Action takes the position (page 12) that col. 12, lines 38-54 of Ruttenberg provides such teaching. Applicants submit that Ruttenberg (and the specific section thereof cited by the Examiner), simply describes how “error recovery module 380 minimizes the transfer of ‘extra data’ when transfers are interrupted or canceled as a result of failures or timeouts. This does not, in any way, teach or suggest that transfers are interrupted based on the status of the local processor.”

Similarly, dependent Claim 8 (depending from dependent Claim 6) recites that the “status of the local processor is inferred from one of: a status of a display device; a status of a memory; a configured processor utilization; and a time since a last interactive use of the local computer system”. The Final Action (page 13), directs Applicants to col. 4, line 41 to col. 5, line 2 for alleged support in Ruttenberg of such teachings. However, Ruttenberg simply discusses “execution module 340, slack module 350, padding module 360, priority module 370 and error recovery module 380” – none of which teach or suggest that the status of the local processor is inferred from one of the elements as listed in Claim 8. Should this rejection be maintained, clarification as to such teaching in Ruttenberg is respectfully requested.

Finally, dependent Claim 10 (also depending from dependent Claim 6) recites that the step of “after automatically arranging for interruption of transfer of the local data, *automatically arranging for resumption of transfer* of the local data based on the status of the local processor”. The Final Action directs Applicants to col. 12, lines 38-54 for support of such element. In this section, Ruttenberg notes that “error recover module uses this information to restart data transfers” – in particular, describing the earlier mentioned stored data regarding “requests accepted by scheduling module 320, resource allocation, the state of each transfer in process, waiting lists 735, and any state required to describe routing policies”. This “stored data” does not read upon, or teach/suggest in any way, the automatic resumption of data transfer “based on the status of the local processor”.

Should the Examiner be of the view that an interview would expedite consideration of this Amendment After Final Rejection, or of the application at large, request is made that the Examiner telephone the Applicants’ undersigned attorney at (908) 518-7700 in order that any outstanding issues be resolved.

Respectfully submitted,



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